Formula for sequence of Lucas-Lehmer residues for Mersenne numbers with prime indices (OEIS A095847)

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Abstract

Formula for sequence of Lucas-Lehmer residues for Mersenne numbers with prime indices (OEIS A095847) .

The sequence is

- **A095847** [1];

  {1, 0, 0, 0, 1736, 0, 0, 0, 6107895, 458738443, 0, 117093979072, 856605019673, 5774401272921, 96699253829728, 5810550306096509, 450529175803834166, 0, 44350645312365507266, 271761692158955752596, 2941647823169311845731}

My personal formula is:

IntegerPart((2-sqrt(3))^(2^(p-2))+(2+sqrt(3))^(2^(p-2)))-(IntegerPart(2^p-1)floor(((2-sqrt(3))^(2^(p-2))+(2+sqrt(3))^(2^(p-2)))/(2^p-1)))

[1] url https://oeis.org/A095847